AMENDMENTS TO THE CLAIMS

Claims 1-9. (Canceled)

Claim 10. (Currently amended) ~~The method of claim 9~~ A method of generating ascorbic acid, comprising:

a) obtaining a recombinant yeast capable of converting an ascorbic acid precursor into ascorbic acid, wherein the yeast is functionally transformed with a coding region encoding a first enzyme selected from D-arabinose dehydrogenase (ARA), D-arabinono-1,4-lactone oxidase (ALO), or L-gulono-1,4-lactone oxidase,

b) culturing the recombinant yeast in a medium comprising an ascorbic acid precursor, thereby forming ascorbic acid, and

c) isolating the ascorbic acid, wherein the yeast is selected from *S. cerevisiae* strain GRF18U; *S. cerevisiae* strain W3031B; *K. lactis* strain PM6-7A; or *Z. bailii* strain ATCC 60483.

Claims 11-16. (Canceled)

Claim 17. (Currently amended) ~~The method of claim 16~~ A method of generating ascorbic acid, comprising:

a) obtaining a recombinant yeast capable of converting an ascorbic acid precursor into ascorbic acid, wherein the yeast is functionally transformed with a coding region encoding D-arabinose dehydrogenase (ARA), wherein the ARA comprises the amino acid sequences GXRXXDXAXXXXXEXXXG (SEQ ID NO:13) and GXXN (SEQ ID NO:26)

b) culturing the recombinant yeast in a medium comprising an ascorbic acid precursor, thereby forming ascorbic acid, and

c) isolating the ascorbic acid.

Claim 18. (Canceled)

Claim 19. (Currently amended) ~~The method of claim 18~~ A method of generating ascorbic acid, comprising:

a) obtaining a recombinant yeast capable of converting an ascorbic acid precursor into ascorbic acid, wherein the yeast is functionally transformed with a coding region encoding a first enzyme selected from D-arabinose dehydrogenase (ARA), D-arabinono-1,4-lactone oxidase (ALO), or L-gulono-1,4-lactone oxidase, wherein the coding region is linked to *S. cerevisiae* triosephosphateisomerase (TPI) promoter,

b) culturing the recombinant yeast in a medium comprising an ascorbic acid precursor, thereby forming ascorbic acid, and

c) isolating the ascorbic acid~~, wherein the promoter is the *S. cerevisiae* triosephosphateisomerase (TPI) promoter~~.

Claim 20. (Canceled)

Claim 21. (Previously presented) The method of claim 24, wherein the coding region encoding the second LGDH was isolated from *A. thaliana*, the coding region encoding the second ALO was isolated from *S. cerevisiae*, the coding region encoding the second AGD was isolated from *A. thaliana*, the coding region encoding the second ARA was isolated from *S. cerevisiae*, or the coding region encoding L-gulono-1,4-lactone oxidase was isolated from *R. norvegicus*.

Claim 22. (Previously presented) The method of claim 24, wherein the AGD enzyme comprises a signaling peptide.

Claim 23. (Previously presented) The method of claim 24, wherein the AGD enzyme does not comprise a signaling peptide.

Claim 24. (Currently amended) ~~The method of claim 7~~ A method of generating ascorbic acid, comprising:

a) obtaining a recombinant yeast capable of converting an ascorbic acid precursor into ascorbic acid, wherein the yeast is functionally transformed with a coding region encoding a first enzyme selected from D-arabinose dehydrogenase (ARA), D-arabinono-1,4-lactone oxidase (ALO), or L-gulono-1,4-lactone oxidase,

b) culturing the recombinant yeast in a medium comprising an ascorbic acid precursor, thereby forming ascorbic acid, and

c) isolating the ascorbic acid,

wherein the yeast is functionally transformed with a coding region encoding a second enzyme other than the first enzyme, wherein the second enzyme is selected from L-galactose dehydrogenase (LGDH), L-galactono-1,4-lactone dehydrogenase (AGD), ARA, ALO, or L-gulono-1,4-lactone oxidase.

Claim 25. (Original) The method of claim 24, wherein the coding region encoding the second enzyme is linked to a promoter active in the yeast.

Claim 26. (Original) The method of claim 25, wherein the promoter is the *S. cerevisiae* triosephosphateisomerase (TPI) promoter.

Claim 27. (Currently amended) ~~The method of claim 7~~ A method of generating ascorbic acid, comprising:

a) obtaining a recombinant yeast capable of converting an ascorbic acid precursor into ascorbic acid, wherein the yeast is functionally transformed with a coding region encoding a first enzyme selected from D-arabinose dehydrogenase (ARA), D-arabinono-1,4-lactone oxidase (ALO), or L-gulono-1,4-lactone oxidase,

b) culturing the recombinant yeast in a medium comprising an ascorbic acid precursor, thereby forming ascorbic acid, and

c) isolating the ascorbic acid,

wherein the recombinant yeast further comprises at least one coding region encoding an enzyme associated with the conversion of a carbon source to L-galactose.

Claims 28-33. (Canceled)